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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,744	12/04/2001	Peter Phung Minh Hoang	NOVA 9202 DIV	1777

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EXAMINER

PASTERCZYK, JAMES W

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 08/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**10/004,744**

Applicant(s)  
**Hoang et al.**

Examiner  
**J. Pasterczyk**

Art Unit  
**1755**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 4, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10-65 is/are pending in the application.
- 4a) Of the above, claim(s) 53-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 10-65 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 10-52, drawn to a catalyst composition, classified in class 502, subclass 103.
- II. Claims 53-65, drawn to an olefin polymerization process, classified in class 526, subclass various depending on the particulars of the catalyst used.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product, such as a Ziegler-Natta or chromium oxide catalyst.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Kenneth Johnson, Esq., on 7/31/02, a provisional election was made with traverse to prosecute the invention of group I, claims 10-52. Affirmation of this election must be made by applicant in replying to this Office action. Claims 53-65 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. The abstract of the disclosure is objected to because it contains misspellings and does not reflect the invention now claimed following the restriction requirement. Correction is required. See MPEP § 608.01(b).

7. Claims 12-17 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12, l. 1, change "catalyst" to --transition metal complex-- for proper antecedent basis; in l. 4 it is not clear that the M refers to those metals of claim 11; in l. 5 change "-type" to --group-containing-- since it is not clear what would make something of the same "type" as a cyclopentadienyl ligand; in l. 6 and 7, change "may be" to --is-- for definiteness.

In claim 13, l. 2, change "-type" to --group-containing-- since it is not clear what would make something of the same "type" as a cyclopentadienyl ligand.

In claim 14, l. 5, change "may be" to --is-- for definiteness; in l. 7-9 change the semicolons to commas to make it clear to which Markush group these subgenuses belong. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation

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(in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 14 recites the broad recitation "halogen atom", and the claim also recites "preferably a chlorine or fluorine atom", which is the narrower statement of the range/limitation.

In claim 15, l. 4, it is not clear that the M refers to those metals of claim 11, and in l. 6 it is not clear that X refers to claim 14. The whole definition of X is confusing since it is first defined broadly in claim 12, then more narrowly in dependent claim 14, and then broadened again in claim 15 which depends from claim 12 via claim 14, hence the breadth of this definition varies though it does not necessarily become narrower with successive dependent claims. In l. 6 change "-type" to --group-containing-- since it is not clear what would make something of the same "type" as a cyclopentadienyl ligand.

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In claim 16, l. 2, change “-type” to --group-containing-- since it is not clear what would make something of the same “type” as a cyclopentadienyl ligand. In l. 6 change the semicolons to commas to clarify to which Markush group these members belong.

In claim 17 change “aluminum complex” to --complex aluminum compound-- for proper antecedent basis.

In claim 35 change “aluminum complex” to --complex aluminum compound-- for proper antecedent basis.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10-52 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koppl et al., USP 5,990,035 (hereafter referred to as Koppl).

The present claims are considered to be product-by-process claims, hence any product that appears to read on the claimed product would inherently anticipate the claimed product absent evidence to the contrary.

Koppl discloses the invention substantially as claimed (col. 2, l. 48-67; col. 4, l. 56 to col. 5, l. 17; col. 5, l. 39-43; claims 1, 2, 4-10). One of ordinary skill in the art would have recognized that the water added to the reaction mixture of the trialkylaluminum compound with the starch or cellulose would have resulted in the production of an alkylaluminumoxane, hence the present claims are considered anticipated by the Koppl reference.

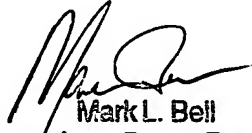
Since the prior art appears to describe and teach the present invention on the basis of inherent property characteristics which either anticipate or render obvious the claimed invention, an alternative 102/103 rejection is deemed appropriate, and the burden of proof that it does or does not shift to applicants as in *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is (703) 308-3497. The examiner can normally be reached on M-F from 9 to 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached on (703) 308-3823. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for normal faxes, 872-9311 for after final faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Mark L. Bell  
Supervisory Patent Examiner  
Technology Center 1700



J. Pasterczyk

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8/13/03